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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,390	04/30/2001	John M. Baron	10006918-1	2736

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EXAMINER

HANNETT, JAMES M

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/845,390	Applicant(s) BARON, JOHN M.	
	Examiner James M. Hannett	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-11, 14-16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 2, 12, 13 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 1/5/2006 have been fully considered but they are not persuasive.

The applicant argues that Pavley and Anderson do not disclose “storing image data elements in an image storage queue in chronological order” or “determining capacity for the camera to add additional image data elements as a function of the archival status and the chronological order in combination”

The examiner disagrees with the applicant. The examiner asserts that Pavley teaches on Column 5, Lines 61-67 and Column 6, Lines 1-18 and depicts in Figure 1 a method for handling image data within a digital camera (114) having a memory storage unit (350 and 354) for storing image data, each image data element having an archival status; and indicating said archival status of the image data element. Furthermore, Pavley teaches on Column 6, Lines 1-6 determining capacity for the camera to add additional image data elements to the image storage. Pavley teaches that when an image is captured, the camera determines if there is sufficient memory space to store the image. Pavley teaches that if more space is needed, the new image will be stored by deleting images from memory which have been backed up elsewhere. The camera of Pavley determines which images have been backed up by checking the archival status of the images. Therefore, Pavley teaches determining the capacity for the camera to add additional image data elements to the image storage as a function of the archival status. Pavley teaches selecting images to delete based on the archival status indicators on the image, however, does not teach that the images can be deleted based on the chronological order in which they were

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captured. Anderson et al teach on Column 6, Lines 62-67 and Column 4, Lines 52-61 That it is advantageous to save images in a digital camera using an image queue (78) so that the images can be read in and out on a first in first out basis. This is advantageous because it allows the image stored in the camera for the longest period of time to be erased first. Therefore, since the images are stored on a FIFO basis, the images are viewed by the examiner to be saved in chronological order based on the time of image capture. The applicant argues that the queue system of Anderson only stores data cell pointers and does not store image data. However, the data cell pointers in Anderson point to image files stored in memory. The examiner views the Queue system to include both the pointers and the image files the pointers refer to.

The applicant argues that Pavley does not teach selection of a file name that indicates archival status.

The examiner disagrees with the applicant and asserts that Pavley teaches on Column 5, Lines 35-41 the use of adding file attribute designators to image files to indicate if the files have been archived. The examiner views the file attribute designators as being part of a file name.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1: Claims 1, 3-11, 14-16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,445,460 Pavley in view of USPN 6,177,956 Anderson et al.

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2: As for Claim 1, Pavley teaches on Column 5, Lines 61-67 and Column 6, Lines 1-18 and depicts in Figure 1 a method for handling image data within a digital camera (114) having a memory storage unit (350 and 354) for storing image data, the camera connectable to an external information handling system (110) adapted to receive image data from the camera, the method comprising: storing image data elements, each image data element having an archival status; and indicating said archival status of the image data element. Furthermore, Pavley teaches on Column 6, Lines 1-6 determining capacity for the camera to add additional image data elements to the image storage. Pavley teaches that when an image is captured, the camera determines if there is sufficient memory space to store the image. Pavley teaches that if more space is needed, the new image will be stored by deleting images from memory which have been backed up elsewhere. The camera of Pavley determines which images have been backed up by checking the archival status of the images. Therefore, Pavley teaches determining the capacity for the camera to add additional image data elements to the image storage as a function of the archival status. However, Pavley does not teach that the images are stored in an image storage queue in chronological order and deleting images based on the time at which the images were captured.

Anderson et al teaches on Column 6, Lines 62-67 and Column 4, Lines 52-61 That it is advantageous to save images in a digital camera using an image queue (78) so that the images can be read in and out on a first in first out basis. This is advantageous because it allows the image stored in the camera for the longest period of time to be erased first. Therefore, since the images are stored on a FIFO basis, the images are viewed by the examiner to be saved in chronological order based on the time of image capture.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store the images captured by the camera of Pavley consecutively in an image storage queue in order to allow the image stored in the camera for the longest period of time to be erased first.

3: As for Claim 3, Pavley further teaches on Column 5, Lines 39-45 each image data element has a filename, and wherein the indicating comprises naming the filename to indicate the archival status. A file attribute designation is viewed by the examiner as a file name. The system of Pavley in view of Anderson is viewed by the examiner as a directory system.

4: In regards to Claim 4, Pavley teaches on Column 4, Lines 44-60 and Column 5, Lines 39-45 and depicts in Figure 4 forming a region in memory that stores the image data (810) and other information such as header information (805) and file attributer designators (825), This is viewed as creating an organizational structure comprising a reserved location for archived image data elements (810); Pavley teaches that a file attribute designator can be set to indicate that the stored image data has been archived. Therefore, the archived image data is places in the image data area (810) of the image file. Image data area (810) is viewed as the reserved location. The system of Pavley in view of Anderson is viewed by the examiner as a directory system.

5: As for Claim 5, Pavley further teaches on Column 6, Lines 10-17 archiving one image data element, the archiving comprising copying the image data element to the external information handling system (computer system); and changing the archival status of the image data element to indicate that the data element is archived.

6: In regards to Claim 6, Pavley further teaches on Column 4, Lines 44-47 and depicts in Figure 4 associating each image data element with a header (805) and image tags (825) which

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indicate that the image has been archived. Official notice is taken that it was well known in the art at the time the invention was made to restructure data packet information and to change the location of different data within the packets.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the header section (805) and the image tags section (825) of the data in Pavley. So that the image tag data was contained in the header information.

7: As for Claim 7, Pavley further teaches on Column 5, Lines 43-45 a data bit indicating archival status, wherein the changing the contents of the header comprises inverting the data bit.

8: In regards to Claim 8, It is inherent that the image files have filenames that comprise at least one character. Furthermore, Pavley further teaches on Column 5, Lines 43-45 the use of a data bit for indicating archival status. The changing of the data bits to indicate archival status is viewed by the examiner to be changing a character. The system of Pavley in view of Anderson is viewed by the examiner as a directory system.

9: As for Claim 9, Pavley further teaches on Column 6, Lines 10-17 receiving a selection from the camera (110) of one image data element (image file) to the computer (1100) for archiving.

10: In regards to Claim 10, Pavley further teaches on Column 6, Lines 10-17 the archiving comprises: connecting the camera (110) to the external information handling system (computer system); and copying the image data element from the memory storage unit in the camera to the external information handling system.

11: As for Claim 11, Pavley teaches on Column 6, lines 1-18 and Column 2, Lines 34-47 the archiving comprises: copying the image data element from the memory in the camera (110) to

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the external information handling system (1100). Pavley teaches that the computer has an optional removable memory port (352) to receive a removable memory card (354). Pavley does not specifically teach that the memory in the camera comprises removable memory.

Official notice is taken that it was well known in the art at the time the invention was made to equip digital cameras with removable memory cards so that the memory capacity of the camera could be substantially increased.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to equip the camera or Pavley with removable memory cards so that the memory capacity of the camera could be substantially increased and to remove the memory cards and connect the removable storage medium to the computer via the memory card interface (352).

12: In regards to Claim 14, Pavley further teaches on Column 5, Lines 63-67 and Column 6, Lines 1-7 determining that the memory storage unit is full and determining if none of the image data elements in the image storage queue have been archived. Pavley teaches that if no images have been archived more storage space is needed. However, Pavley does not teach the method of notifying a user that the memory storage unit is full.

Official notice is taken that it was well know in the art at the time the invention was made to notify users when a memory is full so that a user can take appropriate action and change a memory card if desired.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to notify to user of the camera of Pavley when the memory is full so that a user can take appropriate action and change a memory card if desired.

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13: As for Claim 15, Pavley further teaches on Column 6, Lines 3-9 receiving a selection of an image data element for deletion; and deleting the selected image data element from the memory storage unit. Pavley teaches that the memory management system selects an image file that had been archived and deletes the file since the archived status indicates that the file has been backed up by copying the image data to the personal computer.

14: In regards to Claim 16, Pavley teaches on Column 5, Lines 61-67 and Column 6, Lines 1-18 and depicts in Figure 1 a method for handling image data within a digital camera (114) having a memory storage unit (350 and 354) for storing image data, the camera connectable to an external information handling system (110) adapted to receive image data from the camera, the method comprising: storing image data elements, each image data element having an archival status; and indicating said archival status of the image data element. Furthermore, Pavley teaches on Column 6, Lines 1-6 determining capacity for the camera to add additional image data elements to the image storage. Pavley teaches that when an image is captured, the camera determines if there is sufficient memory space to store the image. Pavley teaches that if more space is needed, the new image will be stored by deleting images from memory which have been backed up elsewhere. The camera of Pavley determines which images have been backed up by checking the archival status of the images. Therefore, Pavley teaches determining the capacity for the camera to add additional image data elements to the image storage as a function of the archival status. However, Pavley does not teach that the images are stored in an image storage queue in chronological order and deleting images based on the time at which the images were captured.

Anderson et al teaches on Column 6, Lines 62-67 and Column 4, Lines 52-61 That it is advantageous to save images in a digital camera using an image queue (78) so that the images can be read in and out on a first in first out basis. This is advantageous because it allows the image stored in the camera for the longest period of time to be erased first. Therefore, since the images are stored on a FIFO basis, the images are viewed by the examiner to be saved in chronological order based on the time of image capture.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store the images captured by the camera of Pavley consecutively in an image storage queue in order to allow the image stored in the camera for the longest period of time to be erased first.

15: In regards to Claim 18, Pavley teaches on Column 5, Lines 61-67 and Column 6, Lines 1-18 and depicts in Figure 1 a method for handling image data within a digital camera (114) having a memory storage unit (350 and 354) for storing image data, the camera connectable to an external information handling system (110) adapted to receive image data from the camera, the method comprising: storing image data elements, each image data element having an archival status; and indicating said archival status of the image data element. Furthermore, Pavley teaches on Column 6, Lines 1-6 determining capacity for the camera to add additional image data elements to the image storage. Pavley teaches that when an image is captured, the camera determines if there is sufficient memory space to store the image. Pavley teaches that if more space is needed, the new image will be stored by deleting images from memory which have been backed up elsewhere. The camera of Pavley determines which images have been backed up by checking the archival status of the images. Therefore, Pavley teaches determining the capacity

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for the camera to add additional image data elements to the image storage as a function of the archival status. However, Pavley does not teach that the images are stored in an image storage queue in chronological order and deleting images based on the time at which the images were captured.

Anderson et al teaches on Column 6, Lines 62-67 and Column 4, Lines 52-61 That it is advantageous to save images in a digital camera using an image queue (78) so that the images can be read in and out on a first in first out basis. This is advantageous because it allows the image stored in the camera for the longest period of time to be erased first. Therefore, since the images are stored on a FIFO basis, the images are viewed by the examiner to be saved in chronological order based on the time of image capture.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to store the images captured by the camera of Pavley consecutively in an image storage queue in order to allow the image stored in the camera for the longest period of time to be erased first.

16: As for Claim 19, Pavley further teaches on Column 6, Lines 10-17 instructions for archiving one image data element, the archiving comprising copying the image data element to the external information handling system (1100); and instructions for changing the archival status of the image data element to indicate that the data element is archived.

17: In regards to Claim 20, Pavley further teaches on Column 5, Lines 63-67 and Column 6, Lines 1-7 instructions for determining that the memory storage unit is full; instructions for determining that at least one image data element in the image storage queue has been archived; and instructions for deleting from the memory storage unit at least one archived image data

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element. Furthermore, Anderson et al teaches on Column 6, Lines 62-67 and Column 4, Lines 52-61 That it is advantageous to save images in a digital camera using an image queue (78) so that the images can be read in and out on a first in first out basis. Therefore, since the images are stored on a FIFO basis, the images are viewed by the examiner to be saved in chronological order based on the time of image capture.

Allowable Subject Matter

18: Claims 2, 12, 13 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hannett whose telephone number is 571-272-7309. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on 571-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett
Examiner
Art Unit 2612



JMH
March 14, 2006


DAVID OMETZ
SUPERVISORY PATENT EXAMINER